

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/833,863	04/12/2001	Tomoyuki Funaki	5259-000001	5194	
27572	7590 05/24/2004		EXAMINER		
HARNESS, DICKEY & PIERCE, P.L.C.			HANNE, SARA M		
P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			ART UNIT	PAPER NUMBER	
			2173	//	
			DATE MAILED: 05/24/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	<b>•</b>		<u></u>	W	
		Application No.	Applicant(s)	1	
		09/833,863	FUNAKI, TOMOYUKI		
	Office Action Summary	Examiner	Art Unit		
		Sara M Hanne	2173		
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet w	ith the correspondence address		
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. a period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period of the provision of the provisions of 37 CFR 1.1  BY THE PROVIDE THE PR	36(a). In no event, however, may a y within the statutory minimum of thi will apply and will expire SIX (6) MOI, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status					
1)[	Responsive to communication(s) filed on	·			
2a)⊠	This action is <b>FINAL</b> . 2b) This	action is non-final.			
3)[	Since this application is in condition for allowar				
	closed in accordance with the practice under-E	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.		
Disposit	ion of Claims				
4)	Claim(s) is/are pending in the application	on.			
	4a) Of the above claim(s) is/are withdraw	wn from consideration.			
5)	Claim(s) is/are allowed.	•			
6)⊠	Claim(s) <u>1-17</u> is/are rejected.				
	Claim(s) is/are objected to.				
8)[	Claim(s) are subject to restriction and/o	r election requirement.			
Applicat	ion Papers				
9)[	The specification is objected to by the Examine	er.			
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the	drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).		
_	Replacement drawing sheet(s) including the correct	·			
11)	The oath or declaration is objected to by the Ex	kaminer. Note the attache	d Office Action or form PTO-152.		
Priority (	under 35 U.S.C. § 119				
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).		
a)	☐ All b)☐ Some * c)☐ None of:	a have been received			
	1. Certified copies of the priority document		Application No.		
	<ul><li>2. Certified copies of the priority document</li><li>3. Copies of the certified copies of the priority</li></ul>				
	application from the International Bureau	•	received in this National Stage		
* 5	See the attached detailed Office action for a list	• • • •	received.		
			BAHWANH		
Attachmen	ıt(s)		PRIMARY EXAMINATION		
· <u></u>	ce of References Cited (PTO-892)		Summary (PTO-413)		
	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		s)/Mail Date Informal Patent Application (PTO-152)		
	er No(s)/Mail Date	6)  Other:	•		

#### **DETAILED ACTION**

- 1. This action is responsive to the amendment received on April 7, 2004. Amended Claims 1-17 are pending in the application.
- 2. The examiner would like to bring to attention that Claim 4 is marked in the Amended claims as being "Currently Amended", but does not appear to have been changed from the original.

### Claim Rejections - 35 USC § 102

- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claims 1, 3-5, 10-11 and 14-15 are rejected under 35 U.S.C. 102(a) as being anticipated by Suzuki et al. US Patent 6362411. Suzuki et al. teaches a performance information edit and playback apparatus (Claim 1, Col. 25), method (Claim 20, Col. 28) and machine-readable media (Claim 21, Col. 28) for doing so as disclosed in Claims 1, 10 and 14 of the application. Suzuki et al. further claims storage for the plurality of style data, each with constituent parts ("plurality of control data stored in the memory may include control data corresponding to a style of rendition", Column 2, lines 63-64) representing accompaniment (Figure 3, Refs 32, 33 these parts add musical data on top of user data) and user data with a plurality of parts ("storage for storing a performance sequence", Column 2, lines 28-29). Suzuki et al. teaches a selector from which the user may select a constituent part of the desired style data ("desired style of rendition", Claim 1) to be copied to a user designated part within the several parts of the user's

**Art Unit: 2173** 

performance data ("one or more notes selected from among the music performance data", Claim 1).

In reference to Claims 4, 5, 11 and 15 Suzuki et al. teaches the simultaneous reproduction on the prescribed user data or the style data with at least one part of the user data not prescribed (Figure 9, specifically references A, B and C where the selected style data may be replicated with different user data, ie. changing the recorded instrument outputs). More specifically in reference to Claim 5 of the application, Suzuki et al. discloses the prescribed part of the user's performance data and at least one of the style data parts to have the same tone-generation channel or tone color ("The tone generation channels to simultaneously generate a plurality of tone signals in the tone generator circuit ... Further, any tone signal generation scheme may be used in the tone generator circuit 2J depending on an application intended ... the effect circuit 2K for imparting various effects to the tone signals generated by the tone generator circuit 2J.", Columns 7-8, lines 57-7 respectively).

In accordance with Claims 7, 13 and 17, Suzuki et al. teaches a performance information edit and playback apparatus, method and machine-readable media as seen *supra* as in Claim 2 of the application and further teaches automatically adjusting a length of the copied constituent part representing accompaniment of the style data ("rendition control factors including ... a specific number of tones involved in the rendition", Claim 12, Column 26) to match the specific part of the user performance data by units of measures (tracks).

Application/Control Number: 09/833,863 Page 4

**Art Unit: 2173** 

In reference to Claim 8 of the application, Suzuki et al. discloses the prescribed part of the user's performance data and the desired style data part to have the same tone-generation channel as seen with Claim 5 *supra*.

In accordance with Claim 3 of the application, Suzuki et al. teaches a performance data window that shows the time-series manner to record user's performance data and a window displaying parts of the style data where the user can designate the style data and the specific part of the user's performance data where it will be applied (Figure 3).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2, 7-8, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US Patent 6362411 and Matsuda, US Patent 5864079. Suzuki et al. teaches a performance information edit and playback apparatus, method and machine-readable media applicable to Claims 1, 10 and 14 of the application along with the limitations seen in Claims 7-8, 13 and 17 as seen *supra*. While Suzuki et al. teaches the edit and playback limitation along with length adjusters, they fail to show the automatic pitch modifier to suit chord information as recited in the claims. Matsuda teaches a performance information edit and playback apparatus similar to that of Suzuki et al. In addition, Matsuda further teaches a pitch modifier which automatically modifies

Art Unit: 2173

tone pitches to suit chord information (Claims 1-2) as applied to Claim 2 of the application.

It would have been obvious to one of ordinary skill in the art, having the teachings of Suzuki et al. and Matsuda before him at the time the invention was made, to modify the edit and playback apparatus, method and media taught by Suzuki et al. to include the automatic pitch modifier of Matsuda, in order to obtain editing apparatus that will automatically change pitches of style data to match the chord. One would have been motivated to make such a combination because a device suitable for several keys would have been obtained, as taught by Matsuda (Column 1, Lines 13-36)

7. Claims 6, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US Patent 6362411 and Hayakawa, US Patent 5326930. Suzuki et al. teaches a performance information edit and playback apparatus, method and machine-readable media as seen *supra*.

While Suzuki et al. teaches an apparatus for recording and sequencing userperformance data (Figure 1, references 1X, 1Y and the information above), they fail to
show the record mode discriminator and corresponding display changes as recited in
the claims. Hayakawa teaches an edit and playback apparatus with music sequencer
similar to that of Suzuki et al. In addition, Hayakawa further the user selected section of
user performance data be selected so that recording of performance data on that part
may begin (punch-in/punch-out switch 17, Column 5 lines 52-65) using a record and
start switch (reference numbers 11,26 and 15). Specifically including a record mode
discriminator, which discriminates whether a recording part representing a performance

Application/Control Number: 09/833,863

**Art Unit: 2173** 

part set to a record mode exists within parts forming user data (LED discriminates whether data has been recorded or not) and displaying the start switch differently in response to the discriminator ("The normally off LED ... stays lit when a punch-out timing is set.", Columns 5-6, Lines 68-1).

It would have been obvious to one of ordinary skill in the art, having the teachings of Suzuki et al. and Hayakawa before him at the time the invention was made, to modify the edit and playback apparatus taught by Suzuki et al. to include the record mode discriminator and corresponding display changes of Hayakawa, in order to obtain a way to distinguish recording sections. One would have been motivated to make such a combination because a more flexible recording apparatus and method would have been obtained, as taught by Hayakawa

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. US Patent 6362411, Matsuda, US Patent 5864079 and Hayakawa, US Patent 5326930. Suzuki et al. teaches a performance information edit and playback apparatus, method and machine-readable media as seen *supra*. Matsuda teaches the automatic pitch modifier of Claim 7.

While Suzuki et al. and Matsuda teach an apparatus for recording and sequencing user-performance data and automatic pitch modification as seen *supra*, they fail to show the record mode discriminator and corresponding display changes as recited in the claims. Hayakawa teaches an edit and playback apparatus with music sequencer similar to that of Suzuki et al. In addition, Hayakawa further the user selected section of user performance data be selected so that recording of performance

Application/Control Number: 09/833,863

Art Unit: 2173

data on that part may begin using a record and start switch as seen with the rejection of Claims 6, 12 and 16 supra.

It would have been obvious to one of ordinary skill in the art, having the teachings of Suzuki et al., Matsuda and Hayakawa before him at the time the invention was made, to modify the edit and playback apparatus taught by Suzuki et al. and automatic pitch modifier of Matsuda to include the record mode discriminator and corresponding display changes of Hayakawa, in order to obtain a way to distinguish recording sections. One would have been motivated to make such a combination because a more flexible recording apparatus and method would have been obtained, as taught by Hayakawa.

## Response to Amendment

Applicant's arguments with respect to the amended claims have been considered. With respect to the argument that the reference has failed to teach the limitation that accompaniment data is not taught the examiner feels that these executions are accompaniment for they are played in conjunction with the performance data. With respect to the argument that the reference has failed to teach the behavior of the start switch, the examiner points out the LED which represents whether user performance data has been recorded for the multiple parts that make up the user data as disclosed *supra*. The Claims nowhere teach that the system designates whether user-performance data has be recorded for consecutive portions of data, therefore the multiple parts can be read as parts played simultaneously.

Page 7

Application/Control Number: 09/833,863

Art Unit: 2173

#### Conclusion

Page 8

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar remote control systems for devices and remote accessing methods.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M Hanne whose telephone number is (703) 305-0703. The examiner can normally be reached on M-F 7:30am-4:00pm.

**Art Unit: 2173** 

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smh

PRIMARY EXAMINER